

In re Appln. Of Shulman et al.  
Serial No. 08/863, 822

program, the instructions performing the steps comprising:

enabling a programming language editor having a  
character position cursor;

determining an identity of input to the programming  
language editor by the user;

automatically resolving symbolic portions of available  
ones of a plurality of programming language statements by  
means of a reverse parse evaluation into a partial program  
compilation that generates identifiable tokens for each of  
the at least one segment therein in response to the input  
being on-demand request by the user;

E-1  
identifying a present programming language statement and  
at least one segment of the present programming language  
statement based on a location of the character position  
cursor;

determining a finite set of information related to the  
present programming language statement and at least one  
segment of the present programming language statement based  
on the automatically generated partial compilation;

automatically generating an assist window of the finite  
set of information;

receiving a representation of a selection by the  
computer programmer from the finite set of information; and

modifying the present programming language statement  
based at least in part on the selected information;

enabling execution of a editing task in response to the  
input being a programming language editor command;

enabling a first type of commit of an identified menu  
item from a selection menu assist window in response to the  
input being a commit key, wherein the step of enabling a  
first type of commit includes:

identifying the commit key as a non-delimiter type  
commit key; and

In re Appln. Of Shulman et al.  
Serial No. 08/863, 822

discarding the commit key;

enabling a second type of commit of an identified menu item from a selection menu assist window in response to the input being a commit key, wherein the second type of commit includes:

E 1 identifying the commit key as a delimiter type commit key; and

inserting the commit key after the identified menu item in the present programming language statement; and

adding to the present programming language statement at a location of the character position cursor in response to the input being a non-commit key type input character. ---

[ Please amend **claims 17, 26 and 28** as follows:

Claim 17. (Twice Amended) A real-time method for assisting a user to modify a programming language statement in a computer program, the real-time method comprising:

enabling a programming language editor having a character position cursor;

6 2 automatically determining an identity of input to the programming language editor by the user;

[continuously] automatically resolving symbolic portions of available ones of a plurality of programming language statements by means of a reverse parse evaluation into a partial program compilation that generates identifiable tokens for each of the at least one segment therein in response to the input being an on-demand request by the user;

identifying a present programming language statement and at least one segment of the present programming language statement based on a location of the character position cursor;

determining a finite set of information related to the

In re Appln. Of Shulman et al.  
Serial No. 08/863, 822

present programming language statement and [the] at least one segment of the present programming language statement based on the automatically generated partial compilation;

automatically generating an assist window of the finite set of information;

receiving a representation of a selection by the computer programmer from the finite set of information; and

modifying the present programming language statement [to] based at least in part on the selected information;

enabling execution of a editing task in response to the input being a programming language editor command;

enabling a first type of commit of an identified menu item from a selection menu assist window in response to the input being a commit key, wherein the step of enabling a first type of commit includes:

identifying the commit key as a non-delimiter type commit key; and

discarding the commit key;

enabling a second type of commit of an identified menu item from a selection menu assist window in response to the input being a commit key, wherein the second type of commit includes:

identifying the commit key as a delimiter type commit key; and

inserting the commit key after the identified menu item in the present programming language statement; and

adding to the present programming language statement at a location of the character position cursor in response to the input being a non-commit key type input character.

---

6 Claim 26. (Amended) The computer-readable medium of claim 52[17], wherein the programming language statement is